

IB

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99TH CONGRESS
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H. R. 2889

[Report No. 99-753, Parts I and II]

To amend the Act establishing the National Bureau of Standards to provide for a computer security research program within such Bureau, and to provide for the training of Federal employees who are involved in the management, operation, and use of automated information processing systems.

IN THE HOUSE OF REPRESENTATIVES

JUNE 27, 1985

Mr. GLICKMAN (for himself, Mr. FUQUA, Mr. BROOKS, Mr. BROWN of California, Mr. WIRTH, Mr. WALGREN, Mr. NELSON of Florida, Mr. WYDEN, Mr. HUGHES, Mr. LEWIS of Florida, and Mr. HORTON) introduced the following bill; which was referred jointly to the Committees on Science and Technology and Government Operations

AUGUST 6, 1986

Reported with amendments from the Committee on Science and Technology

[Strike out all after the enacting clause and insert the part printed in italic]

AUGUST 6, 1986

Reported from the Committee on Government Operations with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed

[Strike out all after the enacting clause and insert the part printed in boldface roman]

[For text of introduced bill, see copy of bill as introduced on June 27, 1985]

A BILL

To amend the Act establishing the National Bureau of Standards to provide for a computer security research program

within such Bureau, and to provide for the training of Federal employees who are involved in the management, operation, and use of automated information processing systems.

1 *Be it enacted by the Senate and House of Representa-*
2 *tives of the United States of America in Congress assembled,*

3 **SECTION 1. SHORT TITLE.**

4 *This Act may be cited as the "Computer Security Act of*
5 *1986".*

6 **SEC. 2. PURPOSE.**

7 *(a) IN GENERAL.—The Congress declares that improv-*
8 *ing the security and privacy of sensitive information in Fed-*
9 *eral computer systems is in the public interest, and hereby*
10 *creates a means for establishing minimum acceptable securi-*
11 *ty practices for such systems, without limiting the scope of*
12 *security measures already planned or in use.*

13 *(b) SPECIFIC PURPOSES.—The purposes of this Act*
14 *are—*

15 *(1) to assign to the National Bureau of Stand-*
16 *ards responsibility for developing standards and guide-*
17 *lines for Federal computer systems, including stand-*
18 *ards and guidelines needed to assure the cost-effective*
19 *security and privacy of sensitive information in Feder-*
20 *al computer systems, by amending the Act of March 3,*
21 *1901;*

1 (2) to provide for promulgation of such standards
2 and guidelines by amending section 111(f) of the Fed-
3 eral Property and Administrative Services Act of
4 1949;

5 (3) to require establishment of security plans by
6 all operators of Federal computer systems that contain
7 sensitive information; and

8 (4) to require mandatory periodic training for all
9 persons involved in management, use, or operation of
10 Federal computer systems that contain sensitive infor-
11 mation.

12 **SEC. 3. ESTABLISHMENT OF COMPUTER STANDARDS PROGRAM.**

13 The Act of March 3, 1901, (15 U.S.C. 271-278h), is
14 amended—

15 (1) in section 2(f), by striking out “and” at the
16 end of paragraph (18), by striking out the period at the
17 end of paragraph (19) and inserting in lieu thereof a
18 semicolon, and by inserting after such paragraph the
19 following:

20 “(20) the study of equipment, procedures, and
21 systems for automatic acquisition, storage, manipula-
22 tion, display, and transmission of information, and its
23 use to control machinery and processes.”;

24 (2) by redesignating section 18 as section 20, and
25 by inserting after section 17 the following new sections:

1 *SEC. 18. (a) The National Bureau of Standards*
2 *shall—*

3 *“(1) have the mission of developing standards,*
4 *guidelines, and associated methods and techniques for*
5 *computer systems;*

6 *“(2) except as described in paragraph (3) of this*
7 *subsection (relating to security standards), develop uni-*
8 *form standards and guidelines for Federal computer*
9 *systems, except those systems excluded by section 2315*
10 *of title 10, United States Code, or section 3502(2) of*
11 *title 44, United States Code;*

12 *“(3) have responsibility within the Federal Gov-*
13 *ernment for developing technical, management, physi-*
14 *cal, and administrative standards and guidelines for*
15 *the cost-effective security and privacy of sensitive infor-*
16 *mation in Federal computer systems except—*

17 *“(A) those systems excluded by section 2315*
18 *of title 10, United States Code, or section*
19 *3502(2) of title 44, United States Code; and*

20 *“(B) those systems which are protected at all*
21 *times by procedures established for information*
22 *which has been specifically authorized under cri-*
23 *teria established by an Executive order or an Act*
24 *of Congress to be kept secret in the interest of na-*
25 *tional defense or foreign policy,*

1 *the primary purpose of which standards and guidelines*
2 *shall be to control loss and unauthorized modification*
3 *or disclosure of sensitive information in such systems*
4 *and to prevent computer-related fraud and misuse;*

5 *“(4) submit standards and guidelines developed*
6 *pursuant to paragraphs (2) and (3) of this subsection,*
7 *along with recommendations as to the extent to which*
8 *these should be made compulsory and binding, to the*
9 *Secretary of Commerce, for promulgation under section*
10 *111 of the Federal Property and Administrative Serv-*
11 *ices Act of 1949;*

12 *“(5) develop guidelines for use by operators of*
13 *Federal computer systems that contain sensitive infor-*
14 *mation in training their employees in security aware-*
15 *ness and accepted security practice, as required by sec-*
16 *tion 5 of the Computer Security Act of 1986; and*

17 *“(6) develop validation procedures for, and evalu-*
18 *ate the effectiveness of, standards and guidelines devel-*
19 *oped pursuant to paragraphs (1), (2), and (3) of this*
20 *subsection through research and liaison with other gov-*
21 *ernment and private agencies.*

22 *“(b) In fulfilling subsection (a) of this section, the Na-*
23 *tional Bureau of Standards is authorized—*

1 “(1) to assist the private sector in using and ap-
2 plying the results of the programs and activities under
3 this section;

4 “(2) to make recommendations, as appropriate, to
5 the Administrator of General Services on policies and
6 regulations proposed pursuant to section 111(f) of the
7 Federal Property and Administrative Services Act of
8 1949;

9 “(3) as requested, to provide to operators of Feder-
10 al computer systems technical assistance in implement-
11 ing the standards and guidelines promulgated pursuant
12 to section 111(f) of the Federal Property and Adminis-
13 trative Services Act of 1949;

14 “(4) to assist, as appropriate, the Office of Per-
15 sonnel Management in developing regulations pertain-
16 ing to training, as required by section 5 of the Com-
17 puter Security Act of 1986;

18 “(5) to perform research and to conduct studies,
19 as needed, to determine the nature and extent of the
20 vulnerabilities of, and to devise techniques for the cost
21 effective security and privacy of sensitive information
22 in Federal computer systems; and

23 “(6) to coordinate closely with other agencies and
24 offices (including, but not limited to, the Departments
25 of Defense and Energy, the National Security Agency,

1 *the General Accounting Office, the Office of Technolo-*
2 *gy Assessment, and the Office of Management and*
3 *Budget)—*

4 “(A) to assure maximum use of all existing
5 and planned programs, materials, studies, and re-
6 ports relating to computer systems security and
7 privacy, in order to avoid unnecessary and costly
8 duplication of effort; and

9 “(B) to assure, to the maximum extent feasi-
10 ble, that standards developed pursuant to subsec-
11 tion (a) (3) and (5) are consistent and compatible
12 with standards and procedures developed for the
13 protection of information in Federal computer sys-
14 tems which is authorized under criteria estab-
15 lished by Executive order or an Act of Congress
16 to be kept secret in the interest of national defense
17 or foreign policy.

18 “(c) As used in this section and section 19, the terms
19 ‘computer system’, ‘Federal computer system’, ‘operator of a
20 Federal computer system’, and ‘sensitive information’ have
21 the meanings given in section 7 of the Computer Security
22 Act of 1986.

23 “SEC. 19. (a) There is hereby established a Computer
24 System Security and Privacy Advisory Board within the
25 Department of Commerce. The Secretary of Commerce shall

1 *appoint the chairman of the Board. The Board shall be com-*
2 *posed of twelve additional members appointed by the Secre-*
3 *tary of Commerce as follows:*

4 “(1) four members from outside the Federal Gov-
5 ernment who are eminent in the computer or telecom-
6 munications industry, at least one of whom is repre-
7 sentative of small or medium sized companies in such
8 industry;

9 “(2) four members from outside the Federal Gov-
10 ernment who are eminent in the fields of computer or
11 telecommunications technology, or related disciplines,
12 but who are not employed by or representative of a pro-
13 ducer of computer or telecommunications equipment;
14 and

15 “(3) four members from the Federal Government
16 who have computer systems management experience,
17 including experience in computer systems security and
18 privacy, at least one of whom shall be from the Nation-
19 al Security Agency.

20 “(b) The duties of the Board shall be—

21 “(1) to identify emerging managerial, technical,
22 administrative, and physical safeguard issues relative
23 to computer systems security and privacy;

1 “(2) to advise the Bureau of Standards and the
2 Secretary of Commerce on security and privacy issues
3 pertaining to Federal computer systems; and

4 “(3) to report its findings to the Secretary of
5 Commerce, the Director of the Office of Management
6 and Budget, the Director of the National Security
7 Agency, and the appropriate Committees of the Con-
8 gress.

9 “(c) The term of office of each member of the Board
10 shall be four years, except that—

11 “(1) of the initial members, three shall be ap-
12 pointed for terms of one year, three shall be appointed
13 for terms of two years, three shall be appointed for
14 terms of three years, and three shall be appointed for
15 terms of four years; and

16 “(2) any member appointed to fill a vacancy in
17 the Board shall serve for the remainder of the term for
18 which his predecessor was appointed.

19 “(d) The Board shall not act in the absense of a
20 quorum, which shall consist of seven members.

21 “(e) Members of the Board, other than full-time employ-
22 ees of the Federal Government, while attending meetings of
23 such committees or while otherwise performing duties at the
24 request of the Board Chairman while away from their homes
25 or a regular place of business, may be allowed travel expenses

1 *in accordance with subchapter I of chapter 57 of title 5,*
2 *United States Code.*

3 “(f) *To provide the staff services necessary to assist the*
4 *Board in carrying out its functions, the Board may utilize*
5 *personnel from the National Bureau of Standards or any*
6 *other agency of the Federal Government with the consent of*
7 *the head of the agency.”; and*

8 (3) *by adding at the end thereof the following new*
9 *section:*

10 “SEC. 21. *This Act may be cited as the National*
11 *Bureau of Standards Act.”.*

12 **SEC. 4. AMENDMENT TO BROOKS ACT.**

13 (a) **AMENDMENT.**—*Section 111(f) of the Federal Prop-*
14 *erty and Administrative Services Act of 1949 (40 U.S.C.*
15 *759(f)) is amended to read as follows:*

16 “(f)(1) *The Secretary of Commerce shall, on the basis*
17 *of standards and guidelines developed by the National*
18 *Bureau of Standards pursuant to section 18(a)(2) and (3) of*
19 *the National Bureau of Standards Act, promulgate standards*
20 *and guidelines pertaining to Federal computer systems,*
21 *making such standards compulsory and binding to the extent*
22 *to which the Secretary determines necessary to improve the*
23 *efficiency of operation or security and privacy of Federal*
24 *computer systems.*

1 “(2) *The head of a Federal agency may employ stand-*
2 *ards for the cost effective security and privacy of sensitive*
3 *information in a Federal computer system within or under*
4 *the supervision of that agency that are more stringent than*
5 *the standards promulgated by the Secretary of Commerce, if*
6 *such standards contain, at a minimum, the provisions of*
7 *those applicable standards made compulsory and binding by*
8 *the Secretary of Commerce.*

9 “(3) *The standards determined to be compulsory and*
10 *binding may be waived by the Secretary of Commerce in*
11 *writing upon a determination that compliance would adverse-*
12 *ly affect the accomplishment of the mission of an operator of*
13 *a Federal computer system, or cause a major adverse finan-*
14 *cial impact on the operator which is not offset by government-*
15 *wide savings. The Secretary may delegate to the head of one*
16 *or more Federal agencies authority to waive such standards*
17 *to the extent to which the Secretary determines such action to*
18 *be necessary and desirable to allow for timely and effective*
19 *implementation of Federal computer systems standards. The*
20 *head of such agency may redelegate such authority only to a*
21 *senior official designated pursuant to section 3506(b) of title*
22 *44, United States Code. Notice of each such waiver and dele-*
23 *gation shall be promptly transmitted to the Committee on*
24 *Government Operations of the House of Representatives and*
25 *the Committee on Governmental Affairs of the Senate.*

1 “(4) *The Administrator shall ensure that such stand-*
2 *ards and guidelines are implemented within an integrated*
3 *information resources management system (as required by*
4 *chapter 35 of title 44, United States Code) by—*

5 “(A) *developing and implementing policies on*
6 *Federal computer system; and*

7 “(B) *revising the Federal information resources*
8 *management regulations (41 CFR ch. 201) to imple-*
9 *ment such standards, guidelines, and policies.*

10 “(5) *As used in this section, the terms ‘computer*
11 *system’, ‘operator of a Federal computer system’, and ‘Feder-*
12 *al computer system’ have the meanings given in section 7 of*
13 *the Computer Security Act of 1986.”.*

14 (b) *TECHNICAL AND CONFORMING AMENDMENTS.—*
15 *Section 111 of such Act is further amended—*

16 (1) *by striking out “automatic data processing*
17 *equipment” and “automatic data processing systems”*
18 *each place they appear and inserting in lieu thereof*
19 *“computer systems”; and*

20 (2) *by striking out “Automatic data processing*
21 *equipment” and inserting in lieu thereof “Computer*
22 *systems”.*

1 **SEC. 5. TRAINING BY OPERATORS OF FEDERAL COMPUTER SYS-**
2 **TEMS.**

3 (a) *IN GENERAL.*—Each operator of a Federal comput-
4 er system that contains sensitive information shall provide
5 mandatory periodic training in computer security awareness
6 and accepted computer security practice. Such training shall
7 be provided under the guidelines developed pursuant to sec-
8 tion 18(a)(5) of the National Bureau of Standards Act (as
9 added by section 3 of this Act), and in accordance with the
10 regulations issued under subsection (c) of this section, for all
11 employees who are involved with the management, use, or
12 operation of computer systems.

13 (b) *TRAINING OBJECTIVES.*—Training under this sec-
14 tion shall be started within 60 days after the issuance of the
15 regulations described in subsection (c). Such training shall
16 be designed—

17 (1) to enhance employees' awareness of the threats
18 to and vulnerability of computer systems; and

19 (2) to encourage the use of improved computer se-
20 curity practices.

21 (c) *REGULATIONS.*—Within six months after the date
22 of the enactment of this Act, the Director of the Office of
23 Personnel Management shall issue regulations prescribing
24 the procedures and scope of the training to be provided under
25 subsection (a) and the manner in which such training is to be
26 carried out.

1 **SEC. 6. ADDITIONAL RESPONSIBILITIES FOR OPERATORS OF**
2 **FEDERAL COMPUTER SYSTEM FOR COMPUTER**
3 **SYSTEMS SECURITY AND PRIVACY.**

4 (a) *IDENTIFICATION OF SYSTEMS THAT CONTAIN*
5 *SENSITIVE INFORMATION.*—*Within 6 months after the date*
6 *of enactment of this Act, each operator of a Federal computer*
7 *system shall identify each computer system, and system*
8 *under development, of that operator which contains sensitive*
9 *information. In the case of a Federal contractor or other or-*
10 *ganization (operating a Federal computer system), such iden-*
11 *tification shall be reviewed and approved by its supervising*
12 *Federal agency.*

13 (b) *SECURITY PLAN.*—*Within one year after the date*
14 *of enactment of this Act, each such operator shall, consistent*
15 *with the standards, guidelines, policies, and regulations pre-*
16 *scribed pursuant to section 111(f) of the Federal Property*
17 *and Administrative Services Act of 1949, establish a plan for*
18 *the security and privacy of the National computer system*
19 *identified pursuant to subsection (a). Copies of such plan*
20 *shall be transmitted to the National Bureau of Standards*
21 *and the National Security Agency for advice and comment.*
22 *In the case of a Federal contractor or other organization (op-*
23 *erating a Federal computer system), such plan shall be trans-*
24 *mitted through its supervising Federal agency. Such plan*
25 *shall be subject to disapproval by the Director of the Office of*
26 *Management and Budget.*

1 **SEC. 7. DEFINITIONS.**

2 *As used in this Act, sections 18 and 19 of the National*
3 *Bureau of Standards Act, and section 111 of the Federal*
4 *Property and Administrative Services Act of 1949—*

5 *(1) the term “computer system” means any equip-*
6 *ment or interconnected collection of equipment, includ-*
7 *ing—*

8 *(A) ancillary equipment;*

9 *(B) software and other procedures;*

10 *(C) services; and*

11 *(D) other resources,*

12 *that are used in the automatic acquisition, storage, ma-*
13 *nipulation, or display, or in any associated electromag-*
14 *netic transmission and reception, of information;*

15 *(2) the term “Federal computer system” means a*
16 *computer system operated by a Federal agency (as that*
17 *term is defined in section 3(b) of the Federal Property*
18 *and Administrative Services Act of 1949) or by a con-*
19 *tractor of a Federal agency or other organization that*
20 *processes information using a computer system on*
21 *behalf of the Federal Government to accomplish a Fed-*
22 *eral Government function;*

23 *(3) the term “operator of a Federal computer*
24 *system” means a Federal agency (as that term is de-*
25 *finied in section 3(b) of the Federal Property and Ad-*
26 *ministrative Services Act of 1949), contractor of a*

1 *Federal agency, or other organization that processes in-*
2 *formation using a computer system on behalf of the*
3 *Federal Government to accomplish a Federal Govern-*
4 *ment function;*

5 *(4) the term "sensitive information" means any*
6 *information, the loss, misuse, or unauthorized access or*
7 *modification of which could adversely affect the nation-*
8 *al interest or the conduct of Federal programs, or the*
9 *privacy to which individuals are entitled under section*
10 *552 of title 5, United States Code (the Privacy Act),*
11 *but which has not been specifically authorized under*
12 *criteria established by an Executive order or an Act of*
13 *Congress to be kept secret in the interest of national*
14 *defense or foreign policy.*

15 **SEC. 8. AUTHORIZATION OF APPROPRIATIONS.**

16 *There are authorized to be appropriated to each Federal*
17 *agency such sums as may be necessary for fiscal years 1987,*
18 *1988, and 1989 to carry out the computer systems security*
19 *training program established by section 5 of this Act and the*
20 *identification and planning requirements of section 6.*

21 **SECTION 1. SHORT TITLE.**

22 **This Act may be cited as the "Computer Secu-**
23 **rity Act of 1986".**

24 **SEC. 2. FINDINGS.**

25 **The Congress finds that—**

1 (1) in recent years the Federal Govern-
2 ment has become highly dependent on auto-
3 mated information processing systems for
4 carrying out many of its missions;

5 (2) the Government operates about 20,000
6 medium- and large-scale mainframe comput-
7 ers and by the end of this decade it will also
8 have approximately half a million micro- and
9 mini-computers;

10 (3) the information stored in Government
11 computers and transmitted over the various
12 communications networks that connect them
13 represent valued property that is vulnerable
14 to unauthorized access and disclosure, fraud-
15 ulent manipulation, and disruption;

16 (4) studies of computer-related fraud and
17 abuse in Government agencies indicate a
18 costly and widespread problem of significant
19 proportions;

20 (5) Government efforts to address the
21 problems of computer security have focused
22 on developing hardware and software systems
23 to protect sensitive information, ensuring
24 that new computer systems are designed to
25 include security provisions, and requiring

1 **agencies to implement security procedures;**
2 **and**

3 **(6) these efforts must be supplemented if**
4 **the problems are to be solved, since the weak**
5 **link in protecting the information stored,**
6 **processed, and transmitted by Government**
7 **computers remains the people who manage,**
8 **use and operate them.**

9 **SEC. 3. ESTABLISHMENT OF COMPUTER SECURITY MANAGE-**
10 **MENT, RESEARCH, AND TRAINING PROGRAM.**

11 **The Act of March 3, 1901 (15 U.S.C. 271-278h),**
12 **is amended by redesignating section 18 as section**
13 **20, and by inserting after section 17 the following**
14 **new sections:**

15 **"SEC. 18. (a) The National Bureau of Stand-**
16 **ards shall have the sole authority and responsibil-**
17 **ity for establishing and conducting a computer se-**
18 **curity management, research, and training pro-**
19 **gram pertaining to computer and telecommunica-**
20 **tions systems that are subject to the provisions of**
21 **section 111 of the Federal Property and Adminis-**
22 **trative Services Act of 1949 (40 U.S.C. 759) or**
23 **chapter 35 of title 44, United States Code. The pri-**
24 **mary emphasis of such program shall be the pre-**
25 **vention of computer-related fraud and abuse. For**

1 such purpose, the Bureau shall prepare and
2 submit to the Secretary of Commerce, for promul-
3 gation under such section 111, government-wide
4 standards and guidelines.

5 “(b) In carrying out the program described in
6 subsection (a), the Bureau shall—

7 “(1) perform research and conduct stud-
8 ies to determine the nature and extent of the
9 vulnerabilities of computer and telecommuni-
10 cations systems in Federal agencies and their
11 contractors;

12 “(2) devise management, administrative,
13 technical, and physical procedures and prac-
14 tices designed to protect the information
15 stored, processed, and transmitted by Gov-
16 ernment computer and telecommunications
17 systems;

18 “(3) develop standards and guidelines for
19 the security of such computer and telecom-
20 munications systems and offer assistance for
21 use by Federal agencies in training their em-
22 ployees, and the employees of their contrac-
23 tors and of other organizations whose com-
24 puter or telecommunications systems inter-
25 face with Government computer systems, in

1 **computer and telecommunications security**
2 **awareness and accepted security practices;**

3 **“(4) make recommendations to the Gen-**
4 **eral Services Administration on computer**
5 **and telecommunications security policy and**
6 **on revisions of regulations proposed pursu-**
7 **ant to section 111(f)(3) of the Federal Proper-**
8 **ty and Administrative Services Act of 1949;**

9 **“(5) develop and coordinate, as appropri-**
10 **ate, with the General Services Administra-**
11 **tion, the Office of Personnel Management,**
12 **and the National Security Agency, joint com-**
13 **puter and telecommunications security stand-**
14 **ards, research, and training programs;**

15 **“(6) validate the effectiveness of comput-**
16 **er and telecommunications security stand-**
17 **ards through research, inspection, and re-**
18 **porting activities;**

19 **“(7) act as liaison between the Federal**
20 **Government and the private sector with re-**
21 **spect to computer and telecommunications**
22 **security issues involving sensitive but unclas-**
23 **sified information and assist the private**
24 **sector in using and applying the results of**

1 **the programs and activities under this sec-**
2 **tion; and**

3 **“(8) establish an advisory council com-**
4 **posed of representatives of other Federal**
5 **agencies.**

6 **“SEC. 19. (a) There is hereby established a**
7 **Computer and Telecommunications Privacy and**
8 **Security Advisory Board within the National**
9 **Bureau of Standards. The Secretary of Commerce**
10 **shall appoint the chairman of the Board. The**
11 **Board shall be composed of twelve additional**
12 **members appointed by the Secretary of Commerce**
13 **as follows:**

14 **“(1) four members from outside the Fed-**
15 **eral Government who are eminent in the**
16 **computer or telecommunications industry, at**
17 **least one of whom is representative of small**
18 **or medium sized companies in such industry;**

19 **“(2) four members from outside the Fed-**
20 **eral Government who are eminent in the**
21 **fields of computer or telecommunications**
22 **technology, or related disciplines, but who**
23 **are not employed by or representative of a**
24 **producer of computer or telecommunications**
25 **equipment; and**

1 **“(3) four members from the Federal Gov-**
2 **ernment who have computer or telecommuni-**
3 **cations systems management experience, in-**
4 **cluding experience in computer security or**
5 **telecommunications security, at least one of**
6 **whom shall be from the National Security**
7 **Agency.**

8 **“(b) The duties of the Board shall be—**

9 **“(1) to identify emerging managerial,**
10 **technical, administrative, and physical safe-**
11 **guard issues relative to computer and tele-**
12 **communications systems security; and**

13 **“(2) to advise the Bureau of Standards**
14 **and the Secretary of Commerce on security**
15 **and privacy issues pertaining to computer**
16 **and telecommunications systems of the Fed-**
17 **eral Government.**

18 **“(c) The term of office of each member of the**
19 **Board shall be four years, except that—**

20 **“(1) of the initial members, three shall be**
21 **appointed for terms of one year, three shall**
22 **be appointed for terms of two years, three**
23 **shall be appointed for terms of three years,**
24 **and three shall be appointed for terms of**
25 **four years; and**

1 **“(2) any member appointed to fill a va-**
2 **cancy in the Board shall serve for the re-**
3 **mainder of the term for which his predeces-**
4 **sor was appointed.**

5 **“(d) The Board shall not act in the absence of**
6 **a quorum, which shall consist of seven members.**
7 **Members of the Board, other than full-time em-**
8 **ployees of the Federal Government, may be com-**
9 **pensated at a rate not to exceed the maximum rate**
10 **of pay for grade GS-18, as provided in subchapter**
11 **III of chapter 53, title 5, United States Code, when**
12 **engaged in the actual performance of duties vested**
13 **in the Board.**

14 **“(e) Members of the Board, other than full-**
15 **time employees of the Federal Government, while**
16 **attending meetings of such committees or while**
17 **otherwise performing duties at the request of the**
18 **Board Chairman while away from their homes or**
19 **a regular place of business, may be allowed travel**
20 **expenses in accordance with subchapter I of chap-**
21 **ter 57 of title 5, United States Code.**

22 **“(f) To provide the staff services necessary to**
23 **assist the Board in carrying out its functions, the**
24 **Board may utilize personnel from the National**
25 **Bureau of Standards or any other agency of the**

1 **Federal Government with the consent of the head**
2 **of the agency.”.**

3 **SEC. 4. AMENDMENT TO BROOKS ACT.**

4 **Section 111(f) of the Federal Property and Ad-**
5 **ministrative Services Act of 1949 (40 U.S.C. 759(f))**
6 **is amended to read as follows:**

7 **“(f)(1) The Secretary of Commerce shall—**

8 **“(A) provide agencies, and the Adminis-**
9 **trator in the exercise of functions delegated**
10 **in this section, with scientific and technologi-**
11 **cal advisory services relating to automatic**
12 **data processing and related systems, includ-**
13 **ing telecommunications systems;**

14 **“(B) establish uniform Federal automatic**
15 **data processing and related telecommunica-**
16 **tions standards and guidelines; and**

17 **“(C) on the basis of standards and guide-**
18 **lines developed by the National Bureau of**
19 **Standards pursuant to section 18(b)(3) of the**
20 **Act of March 3, 1901 (15 U.S.C. 271 et seq.),**
21 **establish standards and guidelines for the se-**
22 **curity of computer and telecommunications**
23 **systems that are subject to this section.**

24 **“(2) The standards established by the Secre-**
25 **tary of Commerce under paragraphs (1)(B) and**

1 (1)(C) shall be compulsory and binding on each
2 Federal agency unless waived by the Secretary of
3 Commerce in writing upon a determination that
4 compliance would adversely affect the accom-
5 plishment of the agency's mission or cause a
6 major adverse financial impact on the agency
7 which is not offset by government-wide savings.
8 Notice of each such waiver shall be promptly
9 transmitted to the Committee on Government Op-
10 erations of the House of Representatives and the
11 Committee on Governmental Affairs of the
12 Senate.

13 “(3) The Administrator shall ensure that such
14 standards and guidelines are implemented within
15 an integrated information resources management
16 system (as required by chapter 35 of title 44,
17 United States Code) by—

18 “(A) developing and implementing poli-
19 cies on the security of automatic data proc-
20 essing and related telecommunications sys-
21 tems; and

22 “(B) revising the Federal information re-
23 sources management regulations (41 CFR ch.
24 201) consistent with such standards, guide-
25 lines, and policies.

1 **“(4) In carrying out functions under para-**
2 **graph (1) of this subsection, the Secretary of Com-**
3 **merce and the Director of the National Bureau of**
4 **Standards are authorized—**

5 **“(A) to accept, hold, administer, and use**
6 **gifts and bequests of property, both real and**
7 **personal, for the purpose of aiding or facili-**
8 **tating such functions; and**

9 **“(B) to accept reimbursement for the per-**
10 **formance of such functions for the benefit of**
11 **another Federal agency or for the benefit of**
12 **any other person or organization, at rates ap-**
13 **proximating the costs thereof.**

14 **“(5) The Secretary is authorized to undertake**
15 **the necessary research in the sciences and tech-**
16 **nologies of automatic data processing computer**
17 **and related systems, including telecommunica-**
18 **tions systems, as may be required under the provi-**
19 **sions of this subsection.”.**

20 **SEC. 5. TRAINING BY FEDERAL AGENCIES IN COMPUTER AND**
21 **TELECOMMUNICATIONS SECURITY.**

22 **(a) IN GENERAL.—Each Federal agency (as**
23 **that term is defined in section 3(b) of the Federal**
24 **Property and Administrative Services Act of 1949)**
25 **shall provide mandatory periodic training in com-**

1 **puter and telecommunications security. Such**
2 **training shall be provided under the guidelines de-**
3 **veloped pursuant to section 18(b)(3) of the Act of**
4 **March 3, 1901 (as added by section 3 of this Act),**
5 **and in accordance with the regulations issued**
6 **under subsection (c) of this section, for all of the**
7 **agency's employees who are involved with the**
8 **management, use, or operation of computer or**
9 **other automated information systems, including**
10 **related telecommunications systems, and for all of**
11 **the employees and other personnel of its contrac-**
12 **tors who are involved with the management, use,**
13 **or operation of computers which interface with**
14 **Government systems.**

15 **(b) TRAINING OBJECTIVES.—Training under**
16 **this section shall be started within 60 days after**
17 **the issuance of the regulations described in sub-**
18 **section (c). Such training shall be designed—**

19 **(1) to enhance employees' awareness of**
20 **the threats to and vulnerability of computer**
21 **and telecommunications systems; and**

22 **(2) to encourage the use of improved**
23 **computer security practices at Government**
24 **facilities.**

1 **(c) REGULATIONS.**—Within six months after
2 the date of the enactment of this Act, the Director
3 of the Office of Personnel Management shall issue
4 regulations prescribing in detail the procedures
5 and scope of the training to be provided by Feder-
6 al agencies under subsection (a) and the manner
7 in which such training is to be carried out.

8 **SEC. 6. ADDITIONAL FEDERAL AGENCY RESPONSIBILITIES**
9 **FOR COMPUTER AND TELECOMMUNICATIONS**
10 **SECURITY.**

11 **(a) IDENTIFICATION OF SENSITIVE SYSTEMS.**—
12 Within 6 months after the date of enactment of
13 this Act, each Federal agency (as that term is de-
14 fined in section 3(b) of the Federal Property and
15 Administrative Services Act of 1949) shall identify
16 each computer and related telecommunications
17 system of that agency within which is or will be
18 stored or through which is or will be transmitted
19 sensitive (but unclassified) information the loss or
20 misuse of which could adversely affect the nation-
21 al interest or the conduct of Federal programs.

22 **(b) SECURITY PLAN.**—Within one year after
23 the date of enactment of this Act, each such Feder-
24 al agency shall, consistent with the standards,
25 guidelines, policies, and regulations prescribed

1 pursuant to section 111(f) of the Federal Property
2 and Administrative Services Act of 1949, establish
3 a plan for the security of the computer and related
4 telecommunications systems and systems in devel-
5 opment identified pursuant to subsection (a).
6 Copies of such plan shall be transmitted to the Na-
7 tional Bureau of Standards and the National Secu-
8 rity Agency for advice and comment. Such plan
9 shall be subject to disapproval by the Administra-
10 tor of General Services.

11 SEC. 7. AUTHORIZATION OF APPROPRIATIONS.

12 There are hereby authorized to be appropri-
13 ated to the National Bureau of Standards for the
14 fiscal years 1987, 1988, and 1989 to carry out the
15 computer security management, research, and
16 training program established by this Act, such
17 sums as may be necessary. There are also author-
18 ized to be appropriated to each Federal agency
19 such sums as may be necessary for fiscal years
20 1987, 1988, and 1989 to carry out the computer and
21 telecommunications security training program es-
22 tablished by section 5 of this Act and the identifi-
23 cation and planning requirement of section 6.

Amend the title so as to read: "A bill to amend the Act establishing the National Bureau of Standards to provide for a computer standards program within such Bureau,

to provide for government-wide computer security, and to provide for the training in security matters of persons who are involved in the management, operation, and use of Federal computer systems.”.

Union Calendar No. 449

99TH CONGRESS
2D SESSION

H. R. 2889

[Report No. 99-753, Parts I and II]

A BILL

To amend the Act establishing the National Bureau of Standards to provide for a computer security research program within such Bureau, and to provide for the training of Federal employees who are involved in the management, operation, and use of automated information processing systems.

AUGUST 6, 1986

Reported with amendments from the Committee on Science and Technology

AUGUST 6, 1986

Reported from the Committee on Government Operations with an amendment, committed to the Committee of the Whole House on the State of the Union, and ordered to be printed